

APPENDIX II. Following are the numbers of items that made up each area/component of CS I and CS II.

A. Area/component of CS I.	Item Numbers
a. Sacrifices in leisure	1, 2, 3, 5, 6, 12, 13
b. Sacrifices in social life.	4, 7, 8, 18, 19, 25
c. Sacrifices in welfare and security	9, 10, 14, 20, 26, 27, 28
d. Sacrifices in level of living.	11, 15, 16, 17, 20, 21, 22, 23, 24, 29, 30

The reliability coefficients of a, b, c and d were estimated to be .61, .54, .72 and .73 respectively.

B. Area/components of CS II	Item Numbers
a. Sacrifices in abundant living.	1, 5, 9, 10, 14, 15, 16, 17, 19, 20, 21, 23
b. Sacrifices in level of living.	4, 6, 8, 13, 18, 24
c. Sacrifices in traditional life style.	2, 3, 7, 11, 12, 22.

The reliability coefficients of a, b and c were observed to be .63, .77 and .59 respectively.

APPENDIX II
INTERVIEW SCHEDULE
FAMILY ENERGY SURVEY

1. Schedule
Number _____

Interviewer _____

Name of the interviewee _____

Address _____

Telephone Number _____

Time: Interview began _____ a.m.; p.m.

Section 1

Would you please tell me about the size of your family?

1. What is the total number of children? 1. _____
2. How many of your children are staying with you for more than 9 months in a year? 2. _____
3. In addition to children you and your husband are there. Isn't it so?
1) Yes 2) No 3. 1 2
4. If others are there, how many adults (above 18 years of age) stay with you? 4. _____
5. How many young members (18 years of age or less) other than your children stay with you? 5. _____
6. Therefore the total number of members in your household including yourself is 6. _____

Now tell me about the ages as of
last birthday yours and your husbands.

7. Husband 7. _____

8. Homemaker 8. _____

To be filled later on using the cate-
gorisation given below:

- (1) 24 or under
- (2) 25-34
- (3) 35-44
- (4) 45-54
- (5) 55 or over

circle the appropriate number.

9. Husband 1 2 3 4 5

10. Homemaker 1 2 3 4 5

The next question concerns your family's education.
Would you tell me the last class completed by each
parents.

- (1) Class 5 or less
- (2) Class 6-9
- (3) S.S.C. completed
- (4) Some college.
- (5) 1st Degree completed
- (6) 2nd Degree completed
- (7) 3rd Degree completed
- Technical education or
vocational training:
- (8) U.G. level
- (9) P.G. level

11. Husband 11. 1 2 3 4 5 6 7 8 9

12. Homemaker 12. 1 2 3 4 5 6 7 8 9

Now, I would like to ask about your family's employment. Please tell me each person's specific occupation (paid service).

13. Husband _____ 13. _____
 14. Wife _____ 14. _____
 15. Child _____ 15. _____
 16. Other if any _____ 16. _____

Would you also tell me approximately how much they earn per month from paid service.

17. Husband Rs. _____ per month 17. _____
 18. Wife Rs. _____ per month 18. _____
 19. Child Rs. _____ per month 19. _____
 20. Other if any Rs. _____ per month 20. _____

21. Are there other sources of income?

- (1) Yes (2) No. 21. 1 2

If yes, what sources. Please specify.

Are these the chief or main source of income to the family.

Sources	Main Source	
	23. Yes	No
22. a. _____	<u>1</u>	<u>2</u>
b. _____	<u>1</u>	<u>2</u>
c. _____	<u>1</u>	<u>2</u>
d. _____	<u>1</u>	<u>2</u>
e. _____	<u>1</u>	<u>2</u>
f. _____	<u>1</u>	<u>2</u>

- To be coded later on.
- (1) Farm earnings
 - (2) Business earnings
 - (3) Rent
 - (4) Interest
 - (5) Dividend
 - (6) Self employment.

24. 1 2 3 4 5 6

If yes, the approximate monthly income from these sources is:

25. Rs. _____ per month

(To be computed later) per capita income.

How many years have you been married

26. Number of years _____

Section II

Information Regarding Energy Resource Consumption:

Would you tell me the sources of energy availed of by your husband's and your parents.

- (1) Agricultural waste
- (2) Wood, Sawdust
- (3) Cowdung
- (4) Biogas
- (5) Solar energy
- (6) Coal
- (7) Kerosene
- (8) Electricity
- (9) Bottled cooking gas (IPG)
- (10) Natural Cooking Gas
- (11) Petrol
- (12) Diesel
- (13) Muscle energy (man and animal)

(Circle the number(s) appropriate)

27. Husband's. 1 2 3 4 5 6 7 8 9 10 11 12 13

28. Homemaker's. 1 2 3 4 5 6 7 8 9 10 11 12 13

29. Please name the main source of energy used in your family after marriage for the following purposes (use the same identification Nos.).

	<u>Name</u>	<u>Number</u>
29.1 Meal preparation	_____	_____
29.2 Meal related activities	_____	_____
29.3 Comfort in living	_____	_____
29.4 Transport	_____	_____
29.5 Heating water for non-meal purpose	_____	_____
29.6 Hobbies, entertainment, recreation etc.	_____	_____
29.7 Irrigation	_____	_____

Any other specify:

30. May I know the different sources of energy you consume now and approximately how much you spend on each per month (Use the identification numbers alongwith names).

30.1	<u>Name</u>	<u>Number</u>	
30.1	_____	_____	Rs. _____ per month
30.2	_____	_____	Rs. _____ per month
30.3	_____	_____	Rs. _____ per month
30.4	_____	_____	Rs. _____ per month
30.5	_____	_____	Rs. _____ per month
30.6	_____	_____	Rs. _____ per month
30.7	_____	_____	Rs. _____ per month

31. Total monthly outlay on all sources of energy

Rs. _____ (To be computed later on).

Are you satisfied with the various sources of energy you currently consume?

- (1) Very satisfied
- (2) Satisfied
- (3) Dissatisfied
- (4) Very Dissatisfied

32. 1 2 3 4 (Circle the appropriate number)

What is the most satisfying characteristic about each energy source you avail of. (Specify the source of energy and identification number).

	<u>Name and number of the Source of Energy</u>	<u>Most Satisfying Characteristic</u>
33.1	_____	_____
33.2	_____	_____
33.3	_____	_____
33.4	_____	_____
33.5	_____	_____
33.6	_____	_____
33.7	_____	_____

What is the most dissatisfying about each energy resource your family consumes.

	<u>Name and number of the Source of Energy</u>	<u>Most Dissatisfying Characteristic</u>
34.1	_____	_____
34.2	_____	_____
34.3	_____	_____
34.4	_____	_____
34.5	_____	_____
34.6	_____	_____

All of us want to attain certain things in relation to energy use. These are otherwise called energy related goals. These goals may be related to the acquisition of goods to raise the level of living which when attained lead to an increase in energy consumption or it may be related to conservation of energy resource. However the attainment of either of these increase your family's satisfaction or state of well-being. Now with this in mind kindly mention such things that are missing which when acquired would make your family happy. Please tell me what energy related goals your family has.

- | | | | |
|------|---|------|-------|
| 35.1 | To own recreational equipment run on electrical energy - <u>a</u> T.V., <u>b</u> Radio, <u>c</u> Record player, <u>d</u> Tape recorder. | 35.1 | _____ |
| 35.2 | To own household electric equipment - <u>a</u> Refrigerator, <u>b</u> Washing machine, <u>c</u> blender, <u>d</u> toaster, <u>e</u> Grinder, <u>f</u> flour mill. | 35.2 | _____ |
| 35.3 | To own non-electrical equipment that consume power (energy) - <u>a</u> Stove, <u>b</u> Iron, <u>c</u> Over, <u>d</u> Gas-burners, <u>e</u> Gas cooking range. | 35.3 | _____ |
| 35.4 | To get natural gas supply connection. | 35.4 | _____ |
| 35.5 | To <u>a</u> Air condition, or <u>b</u> Air cool the house. | 35.5 | _____ |
| 35.6 | Add a few more light and fan points - <u>a</u> Light points, <u>b</u> Fans. | 35.6 | _____ |
| 35.7 | Install water heating system. | 35.7 | _____ |
| 35.8 | Own transportation means such as - <u>a</u> Moped, <u>b</u> Scooter/motor bike, <u>c</u> Car. | 35.8 | _____ |
| 35.9 | Own a larger vehicle than the one the family has. | 35.9 | _____ |

- 35.10 Minimise energy consumption. 35.10 _____
- 35.11 Minimise wastage of energy at the point of use. 35.11 _____
- 35.12 Substitute muscle energy (human, animal etc.) for commercial sources of energy. 35.12 _____
- 35.13 Any other (specify). 35.13 _____

Now kindly rank order your energy related goals.

- 35.1 Increase level of living through the acquisition of material goods. 1 2 3 4
- 36.2 Minimise energy consumption. 1 2 3 4
- 36.3 Minimise wastage of energy. 1 2 3 4
- 36.4 Substitute muscle (human or animal) energy for commercial sources of energy. 1 2 3 4
37. What are your family's fears and worries regarding the future that might affect the energy related toals.

Your fears.....

- 1.
- 2.
- 3.
- 4.
- 5.

Suppose you say at the top of the ladder the family would have achieved all its goals you just described, at the bottom it would have achieved none. So whereon this ladder do you feel your family is at the present as far^{as} energy related goals are concerned.

- | | | |
|---------|--|----|
| Type I | Level of living oriented
energy goals. | 10 |
| Type II | Energy conservation oriented
goals. | 9 |
| 38.1 | Step number in Type I goals _____ | 8 |
| 38.2 | Step number in Type II goals _____
whereon this ladder your family was
five years ago. | 7 |
| | | 6 |
| 39.1 | Step number in Type I goals _____ | 5 |
| 39.2 | Step number in Type II goals _____
whereon this ladder do you think your
family would be after <u>five years from now.</u> | 4 |
| | | 3 |
| 40.1 | Step number in Type I goals _____ | 2 |
| 40.2 | Step number in Type II goals _____ | 1 |
41. Which of the goals stated above does your family expect to achieve within the next five years (specify).
- | | |
|----------|-----------|
| 1. _____ | 7. _____ |
| 2. _____ | 8. _____ |
| 3. _____ | 9. _____ |
| 4. _____ | 10. _____ |
| 5. _____ | 11. _____ |
| 6. _____ | 12. _____ |
42. There might be some obstacles that are stopping your family from realising its energy related goals. Now, I would like to know some of the things that seem to be keeping you from attaining your energy related goals.
- 1.
 - 2.
 - 3.
 - 4.
 - 5.



4. Husband work far away from home to earn a higher income.	DWF	WF	U	WN	DNF
5. Husband work overtime.	DWF	WF	U	WN	DNF
6. Family start nursery or day care centre for children.	DWF	WF	U	WN	DNF
7. Family leave its present community and stay elsewhere.	DWF	WF	U	WN	DNF
8. Family spend leisure at home.	DWF	WF	U	WN	DNF
9. Adults not visit the doctor unless very sick.	DWF	WF	U	WN	DNF
10. Children not visit the doctor unless very sick.	DWF	WF	U	WN	DNF
11. Family out down expenditure on gifts.	DWF	WF	U	WN	DNF
12. Husband takes on more responsibilities.	DWF	WF	U	WN	DNF
13. Husband gives up spare time.	DWF	WF	U	WN	DNF
14. Family spend less money on private tuition.	DWF	WF	U	WN	DNF
15. Family cut down expenditure on transportation.	DWF	WF	U	WN	DNF
16. Family move to a cheaper house.	DWF	WF	U	WN	DNF
17. Family spend less on vacation trips than before.	DWF	WF	U	WN	DNF
18. Family leave its friends in the present community.	DWF	WF	U	WN	DNF
19. Family move to a community (area) where most of the families are of a different socio-economic background.	DWF	WF	U	WN	DNF
20. Family contribute less to voluntary savings programme than before (so that this amount can be used for buying fridge, car, scooter and the like).	DWF	WF	U	WN	DNF

21. Family cut down on clothing expenditure.	DWF	WF	U	WN	DNF
22. Family cut down the expenditure on paid domestic servants.	DWF	WF	U	WN	DNF
23. Family spend less on news paper, story books, magazines, etc.	DWF	WF	U	WN	DNF
24. Family make less number of visits to the beauty saloon and hair cutting saloon.	DWF	WF	U	WN	DNF
25. Family reduce its expenditure on clubs - Mahila mandals, local activities during festivals, club expenses etc.	DWF	WF	U	WN	DNF
26. Family spend less on housing expenditure than earlier.	DWF	WF	U	WN	DNF
27. Family cut down expenditure on all the food related items.	DWF	WF	U	WN	DNF
28. Family move to house in an undeveloped area.	DWF	WF	U	WN	DNF
29. Family spend less than before on interior decoration (e.g. furniture, furnishing, accessories).	DWF	WF	U	WN	DNF
30. Family spend less than before on entertaining friends.	DWF	WF	U	WN	DNF

47. Commitment Scale II

The following question aims at finding out what you and your family are willing and determined to do to achieve your expected energy conservation oriented goals (Type II goals).

Key for the response categories:

DWF = Definitely would follow.

WF = Would follow.

U = Uncertain.

WN = Would not follow.

DNF = Definitely would not follow.

Please indicate the extent of willingness and determination to follow these lines of action, if by doing so, your family could attain its energy conservation oriented goals (Type II goals) by specifying the appropriate response category.

- | | | | | | |
|---|-----|----|---|----|-----|
| 1. Many members share the same room while working so as to make use of common lighting and fans. | DWF | WF | U | WN | DNF |
| 2. Family use energy efficient cooking pans (eg. pans of good conductors of heat, proper diameter etc.) | DWF | WF | U | WN | DNF |
| 3. Family use less such fabric that require more commercial energy to maintain. | DWF | WF | U | WN | DNF |
| 4. Family pursue such recreational activities that need little or no commercial energy. | DWF | WF | U | WN | DNF |
| 5. Family use fans, lights etc. only when necessary. | DWF | WF | U | WN | DNF |
| 6. Family buy a vehicle consuming less energy (eg. moped instead of scooter, scooter instead of car). | DWF | WF | U | WN | DNF |
| 7. Family use energy efficient equipment or appliances. | DWF | WF | U | WN | DNF |
| 8. Family adopt simple living style. | DWF | WF | U | WN | DNF |

9. Family switch off gadgets when not in use.	DWF	WF	U	WN	DNF
10. Family use the most of day light to perform tasks.	DWF	WF	U	WN	DNF
11. Family use functional lighting.	DWF	WF	U	WN	DNF
12. Family cook less of elaborate meals than before.	DWF	WF	U	WN	DNF
13. Family use less of gadgets for household work.	DWF	WF	U	WN	DNF
14. Family use bicycle more often than automobiles.	DNF	WF	U	WN	DNF
15. Family lower flame once food starts boiling.	DNF	WF	U	WN	DNF
16. Family use tight fitting lids for cooking pans to economise fuel consumption.	DNF	WF	U	WN	DNF
17. Family be alert while using gadgets to avoid energy wastage at the point of use.	DNF	WF	U	WN	DNF
18. Family use less of private transport.	DNF	WF	U	WN	DNF
19. Family put out stove rather than leave it on while collecting the next pan to be kept on stove.	DNF	WF	U	WN	DNF
20. Family switch off fans and lights soon after use.	DNF	WF	U	WN	DNF
21. Family walk down distances more often.	DNF	WF	U	WN	DNF
22. Family avoid reheating of food.	DNF	WF	U	WN	DNF
23. Family switch off cooking units a few minutes prior to removing pans to use the heat of the stove	DNF	WF	U	WN	DNF
24. Family move to a house closer to work place to limit energy consumption on transport.	DNF	WF	U	WN	DNF

SECTION IV

Attitude Scale:

Schedule No. _____

Name : _____

Address: _____

48. The following statements are related to the energy situation and family's social responsibility in the current energy situation. There is no right and wrong answer. Keep this in mind and indicate your agreement or disagreement in relation to each statement.

SA = Strongly Agree
 A = Agree
 U = Uncertain
 D = Disagree
 SD = Strongly Disagree

- | | | | | | |
|---|----|---|---|---|----|
| 1. Petrol, coal, cooking gas, etc. on earth should be decreasing fast. | SA | A | U | D | SD |
| 2. This energy problem could have far reaching effect on man's survival. | SA | A | U | D | SD |
| 3. The energy problem might not be a serious one. | SA | A | U | D | SD |
| 4. The problem of energy might not be real. | SA | A | U | D | SD |
| 5. Petrol, kerosene, coal etc. is formed at a rate faster than it is being used up. | SA | A | U | D | SD |
| 6. The energy problem could be felt everywhere in the world (global phenomena). | SA | A | U | D | SD |
| 7. The energy problem should be viewed as a crisis. | SA | A | U | D | SD |

- | | | | | | |
|--|----|---|---|---|----|
| 8. Scientists would find a solution to the energy problem (cheap means of getting solar energy or a substitute for petrol will be invented). | SA | A | U | D | SD |
| 9. Strict energy conservation should be done for the survival of man. | SA | A | U | D | SD |
| 10. Petroleum, coal, gas etc. on earth should be enough to meet the needs of many generations. | SA | A | U | D | SD |
| 11. The energy problem could be the result of the ban (stoppage) of oil supply from countries where it is produced. | SA | A | U | D | SD |
| 12. The energy problem should be ignored. | SA | A | U | D | SD |
| 13. The energy problem would disappear soon. | SA | A | U | D | SD |
| 14. The energy problem would increase if the present conditions remain the same. | SA | A | U | D | SD |
| 15. The energy problem should finally make man's existence impossible. | SA | A | U | D | SD |
| 16. The price increases and shortage of petrol, electricity etc. should be considered as reflections of the energy problem. | SA | A | U | D | SD |
| 17. Families should use more of hand operated equipment than power equipment. | SA | A | U | D | SD |
| 18. Judicious (intelligent) use of energy resources should be made by families. | SA | A | U | D | SD |
| 19. Families should develop values that promote conservation of energy resources. | SA | A | U | D | SD |
| 20. Microdecisions made by the family in daily living should have no impact on the national energy problem. | SA | A | U | D | SD |

- | | | | | | |
|---|----|---|---|---|----|
| 21. Families should continue their life style based on the abundance of energy resources. | SA | A | U | D | SD |
| 22. The size of the family should have no effect on the energy problem. | SA | A | U | D | SD |
| 23. Families should learn more about the energy problem from reliable sources. | SA | A | U | D | SD |
| 24. Parents should train the family members to adopt labour intensive (utilising muscle energy) life style. | SA | A | U | D | SD |
| 25. The Government should bear the whole responsibility of tackling the energy problem. | SA | A | U | D | SD |
| 26. Families would be wasting their time if they participate in education programme about energy conservation. | SA | A | U | D | SD |
| 27. The national energy problem should be tackled by utilising renewable energy resources like solar energy, wind energy etc. for industrial purposes rather than shift the responsibility to the domestic level. | SA | A | U | D | SD |
| 28. Families need not bear the responsibility of conserving energy resources. | SA | A | U | D | SD |
| 29. National problems should not be of concern to the family. | SA | A | U | D | SD |
| 30. Family should bring about change in our wasteful energy consumption behavior. | SA | A | U | D | SD |
| 31. Families should use solar energy for domestic purposes. | SA | A | U | D | SD |
| 32. Families should be having the potential to conserve energy resources. | SA | A | U | D | SD |